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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,901	07/13/2006	Raoul Aemisegger	0115-061851	4069

28289 7590 04/30/2008  
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EXAMINER
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LEE, BENNY T

ART UNIT	PAPER NUMBER
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2817

MAIL DATE	DELIVERY MODE
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04/30/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/585,901	<b>Applicant(s)</b> AEMISEGGER, RAOUL	
	<b>Examiner</b> Benny Lee	<b>Art Unit</b> 2817	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 July 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 17-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-21 and 25-37 is/are rejected.
- 7) ☒ Claim(s) 22-24 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 July 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                        |                                                                   |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>13 November 2006</u>                                          | 6) <input type="checkbox"/> Other: _____                          |

35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms which are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are: Page 1, line 26, "on account of its structure" should be rephrased for idiomatic clarity. Page 3, line 37, note that "US-A" should be rewritten as --US Patent Publication--. Page 4, line 23, "on account of" should be rephrased as --due to-- for idiomatic clarity. Page 7, lines 9, 10, "By the sheathing 27" needs rephrasing.

The disclosure is objected to because of the following informalities: Page 2, line 12, note that --(see Fig. 1)-- should be inserted after "16" for an appropriate characterization. Page 3, lines 18, 19, 20, note that the reference labels therein do not appear in any drawing figure in the application and thus should be deleted as being unnecessary. Page 5, lines 4, 20, 26, 30, note that it is unclear whether the respective designations of "1/10", "2/10" & "6/100" are intended to designate a ratio of the two numbers or a range between the two numbers. Clarification is needed. Page 7, line 16, note that --(see Fig. 3)-- should be inserted after "26" for an appropriate characterization. Appropriate correction is required.

The use of the trademark "SUCOFLEX" (e.g. page 2, lines 24, 31; page 4, line 5) has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

The drawings are objected to because in Figs. 1 & 2, note that the designation “PRIOR ART” should either be added for each drawing figure or the single “PRIOR ART” designation should be clearly directed to both drawing figures (e.g. by respective arrows).

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the connection of the first and second outer conductors at ends of the coaxial cable as recited in claim 37 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the

Art Unit: 2817

following is required: The specification needs to provide a corresponding description for the following claimed subject matter: the braided means having a “minimum coverage of 50%” as recited in claim 32; the braided means having synthetic fibers of “aramid fibers” as recited in claim 34.

Claims 25, 30, 32, 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 25, 30, 32, 36, note that it is unclear whether the respectively numerical designations recited in these claims are intended to designate a ratio of the two numbers or a range between the two numbers. Clarification is needed.

The following claims have been found to be objectionable for reasons set forth below:

In claims 17, 18, at appropriate occurrences, note that “means of ...” should be rewritten as --means for ...-- for an appropriate means plus function recitation.

In claims 23, 24, 26, 27, note that the term “formed” should be deleted as being unnecessary.

In claim 25, note that “the wall thickness of the coaxial sheathing lies” should be rephrased as --the coaxial sheathing has a wall thickness which lies-- for an appropriate characterization.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 17-20 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by the Sasai et al patent abstract (cited by applicant).

Sasai et al discloses a coaxial cable comprising: a central (i.e. inner) conductor (1); a dielectric or insulation layer (2) surrounding the inner conductor (1); a first (i.e. inner) outer conductor (3) comprised of conductive tape wound about the insulation layer (2) in a spiral or helical manner; a second (i.e. outer) outer conductor (5) comprised of a braided conductor, which inherently provides for tensile strength within the cable by virtue of the braided configuration; a jacket or sleeve (6) which sheaths the second outer conductor; and a synthetic resin (i.e. electrically insulating) tape (4) interposed between the first spirally wrapped outer conductor (3) and the second braided outer conductor (5) such as to coaxially sheath the first outer conductor. Note that the overall coaxial cable structure (including synthetic resin tape layer 4) provides excellent vibration and shock resistance, thereby inherently providing mechanical stabilization for the coaxial cable. Moreover, note that the coaxial cable structure also provides excellent shielding characteristics, thereby inherently providing for electrical stabilization of the coaxial cable structure.

Claims 17-21, 27, 28, 33 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Carroll (cited by applicant).

Carroll discloses a coaxial cable comprising: a silver plated copper inner conductor (1); an extruded polymer material (2) enclosing the inner conductor; a metal-coated polymer tape layer (3) helically or spirally wrapped around the polymer material (2) to thereby form a first (i.e. inner) outer conductor; a braid of metal or synthetic (i.e. plastic) fibers (e.g. 4) enclosing the first outer conductor to thereby form a second outer conductor; a sleeve (8) coaxially sheathing the

Art Unit: 2817

second outer conductor; and a plastic (e.g. FEP) separator (5) and a wire layer (6) interposed between the first and second outer conductors, such as to function to provide crush resistance through increased tensile strength and thereby effect mechanical stabilization of the coaxial cable.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17-21, 25-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art (Figs. 1 & 2) in view of Nixon ('089).

Note that the admitted prior art (i.e. Figs. 1 & 2) substantially disclose the claimed invention except for the placement of a stabilizing means between the first wrapped outer conductor and the second braided outer conductor, such as claimed with respect to independent claim 17.

Nixon ('089) discloses a compressible plastic medium (24), which is interposed between a first outer conductor (e.g. 16) and a second outer conductor (e.g. 26) of a coaxial cable (10A). Note that the compressible plastic medium functions to distribute squeeze pressure exerted by the braided outer conductor (26). The effect of this distributed pressure causes the compressible medium to embed with respect to the first outer conductor and thereby provide stable parameters (e.g. see column 7, lines 1-3 & 21-14).

Accordingly, it would have been obvious in view of the references, taken as a whole, to have added the compressible plastic medium as taught by Nixon ('089) to the coaxial cable of

Art Unit: 2817

the admitted prior art (i.e. between the first and second outer conductors, such as to have been consistent with the teaching in Nixon). Such a modification would have been considered obvious since it would have imparted to the coaxial cable of the admitted prior art the benefits of a more stable coaxial cable provided by such a compressible medium, as taught by Nixon, and thus suggesting the obviousness of such a modification. Furthermore, as an obvious consequence of such a modification, one of ordinary skill in the art would have found it obvious to have made further obvious design considerations with respect to materials and dimensions of the various components. For example, use of alternative plastic materials (e.g. FEP) instead of PTFE for the compressible plastic medium would have been considered an obvious design consideration within the purview of one of ordinary skill in the art. Likewise providing dimensions and materials for the various conductive and dielectric features of the coaxial cable (e.g. such as those dimensions and material claimed) would have been considered obvious design considerations within the purview of one of ordinary skill in the art. Finally, as known to one of ordinary skill in the art, it would have been obviously necessary to have electrically connected the first and second outer conductors to each other as to place such outer conductors at the same electrical potential (e.g. ground) as to maintain the shielding effect provided by such outer conductors, thereby suggesting the obviousness of such a modification.

Claims 22-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claim.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.



Art Unit: 2817

Nixon ('810) discloses a coaxial cable similar to the coaxial cable in Nixon ('089).

Any inquiry concerning this communication should be directed to Benny Lee at  
telephone number 571 272 1764.

**/BENNY LEE/  
PRIMARY EXAMINER  
ART UNIT 2817**

B. Lee